

Periscope.

EXCERPTS WILL BE FURNISHED AS FOLLOWS:

<i>From the Swedish, Danish, Norwegian and Finnish:</i> F. H. PRITCHARD, Norwalk, Ohio.	<i>From the Italian and Spanish:</i> WILLIAM C. KRAUSS, M.D., Buffalo, N. Y.
<i>From the French and German:</i> L. FISKE BRYSON, M.D., N. Y. BELLE MACDONALD, M.D., N. Y. PH. MEIROWITZ, New York.	<i>From the Italian and French:</i> E. P. HURD, M.D., Newburyport, Mass.
R. K. MACALESTER, M.D., N. Y.	<i>From the English and American:</i> A. FREEMAN, M.D., New York.

The Editor will not accept as ORIGINAL ARTICLES and CLINICAL CASES those that have appeared elsewhere.

Authors are requested to make none but typographical corrections on the proof sent to them. The manuscript must represent the final form in which the article is to be printed.

PHYSIOLOGICAL.

The Value of Sugar and the Effect of Smoking on Muscular Work.—Vaughan Harley, M. D., M. R. C. P. (*Journal of Physiology*, March 22. 1894). The periods of digestion, as well as the kind of food taken, have a marked influence on voluntary muscular energy. Irrespective of the influence of food there is a periodical diurnal rise and fall in the power of performing muscular work. More work can be done after than before midday. The minimum amount of muscular power is in the morning about 9 A. M. The maximum about 5 in the afternoon. Regular muscular exercise not only increases the size and power of the muscles, but has the effect of markedly delaying the approach of fatigue. The amount of work performed on a diet of sugar alone is almost equal to that obtained on a full diet, fatigue, however, setting in sooner. In fasting, large quantities of sugar (500 grams) can increase the power of doing

muscular work during 30 voluntary contractions from 26 to 33 per cent. While the total gain in a day's work may be 61 to 76 per cent., the time before fatigue sets in is also lengthened. The effect of sugar is so great that when added to a small meal it can increase the muscular power during 30 contractions from 9 to 21 per cent., and the approach of fatigue is at the same time retarded. When added to a large mixed meal sugar can increase the muscular power of 30 contractions 2 to 7 per cent. The increase in total work is 8 to 16 per cent., and a marked increase in the resistance to fatigue is shown. Two hundred and fifty grams of sugar taken in addition to a full diet increases the day's work. The work accomplished during 30 voluntary muscular contractions shows a gain of from 6 to 28 per cent., the total day's work giving an increase of power 9 to 36 per cent., and the time before fatigue sets in is lengthened. Moderate smoking, although it may have a slight influence in diminishing the power of doing voluntary muscular work, neither stops the morning rise, nor, when done early in the evening, hinders the evening fall. Sugar taken early in the evening is capable of obliterating the diurnal fall in muscular power that occurs at this time, and increases the resistance to fatigue.

A. F.

A Study of the Reflexes in Thirty-four Epileptics.—Doctor Arthur Donaggio, of Reggio, publishes in the *Revista Sperimentale di Freniatria e di Medicina Legale*, Fas. i., 1894, the results of his examination of the reflexes, muscular force, and measurements of the extremities in thirty-four cases of epilepsy.

In the interval he found the patellar reflexes exaggerated in fifteen, medium in eight, diminished in seven and absent in two cases. There existed in the fifteen cases a difference of exaggeration, being stronger on the right side in ten, stronger on the left side in five cases. The tendo-Achilles reflex in twenty-seven cases was exaggerated in nine, medium in thirteen, diminished in three, and absent in two cases. The bicipital in thirty-one cases was exaggerated in eight, medium in twelve, diminished in nine, and absent in two cases. The olecranon reflex was exaggerated in six, medium in nine, diminished in nine, and absent in seven—of thirty-one cases examined. The abdominal reflex in thirty-two cases, was exaggerated in three, medium in three, diminished in eleven, and absent in fifteen cases. The cremasteric reflex in twenty-five cases examined was exagger-